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We Claim

~~Patent claims~~

- 5 1. A method for the determination of combustion misfires in an internal combustion engine having a plurality of cylinders, wherein at least two successive compression times and expansion times are determined for at least one cylinder of the internal combustion
- 10 engine, for the determination of combustion misfires a comparison of the change in the compression times with the change in the expansion times being carried out, and the result of the comparison being a measure of a combustion misfire.
- 15 2. The method as claimed in claim 1, wherein the method is carried out as function of predeterminable parameters of the internal combustion engine and/or of predeterminable ambient parameters of the internal combustion engine.
- 20 3. The method as claimed in claim 1 ~~or 2~~, the method being carried out for each cylinder of the internal combustion engine. *Claim 1*
- 25 4. The method as claimed in ~~one of claims 1 to 3~~, wherein, after the detection of at least one combustion misfire, in particular after a predeterminable number of combustion misfires, a fault signal is generated and emitted. *Claim 1*
- 30 5. The method as claimed in ~~one of the preceding claims~~, wherein a threshold value for the measure of a combustion misfire is formed at least as a function of at least one parameter of the internal combustion engine, no fault signal being generated if the comparison result exceeds or falls short of this threshold value.

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claim 1

6. The method as claimed ~~in one of the preceding~~
~~claims~~, wherein the method is not carried out in the
case of a deviation from permissible value ranges for
the predeterminable parameters of the internal
5 combustion engine and/or for the predeterminable
ambient parameters of the internal combustion engine.

7. The method as claimed ~~in one of the preceding~~
~~claims~~, used in an on-board diagnostic device at least
for the internal combustion engine driving a vehicle,
10 in particular a passenger vehicle.

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